AN AMERICAN IN EUROPE.

Observations Upon the Life and Politics of Twenty-five Years Ago.

BY THE LATE

JAMES SHEPHERD PIKE.

The Highlands.

Going from Edinburgh we come upon the Highlands just before we reach Stirling. They lie in a line almost directly across our path, forming the ramparts of a nearly level country over which we pass in our approach.

On one of the perpendicular spurs, jutting conspicuously from the range, stands a white unfinished shaft, a monument to William Wallace. It being late in the season the regular conveyances to the Trosachs were all discontinued. We took a carriage for Loch Katrine, through this celebrated pass. The day was perfect, the first good one we had had for a week. Though the weather promised well, we would run no risk of its continuance. A wise determination, as the sequel proved, for the morrow opened cold and rainy, the hills were concealed by mist and the high rolling moors in the distance covered with snow, and a fierce gale was blowing.

We pushed on ten miles to the lake at a brisk trot, these Highland horses not checking their pace for small hills. It is one advantage of these rocky and mountainous countries that the foundation for their roads is so good that a week's rain does not make an inch of mud on their solid surface.

We had seen a high hill with its top sprinkled with snow before we left the cars, which we soon found to be Ben Lodi. We had some hesitation in accepting this as a specimen of the celebrated mountains of Scotland, but concluded to do it out of respect to the gentlemen who had made so much out of them. On our way up to the lake we left Ben Lodi on our right, passing it without difficulty, which lessened our respect a little, since a veritable mountain, we have always found by experience, stands long in your way. We passed up by the side of a long, narrow pond of clear water, known as Loch Vennachor, and directly in front of us rose a hill of fuller proportions and somewhat higher in appearance. This was Ben Venue, on the side of which Fitz James lost that famous "gallant grey" which young persons have so long and so often lamented.

On our right rose a little lump of a hill, which we were informed was the third celebrated mountain of the district—Ben Aan.

We found no hindrance in driving at a trot through the Trosachs, and, while we perceived it was wild and beautiful, we were yet more struck by what we did not see.

Loch Katrine was soon at our feet in the shape of a long, crooked neck of water, which seemed deep and clear. It was bounded by steep wooded banks, and threaded its circuitous way a mile or more into the main body of the lake beyond. A little screw steamer lay moored near a small pier, which, together with the passage to it, was covered by thatch resting on rustic supports.

The arrangements were of small service to us, as the season had closed, and they were simply mementos of the past and the promise of that which is to come.

We were solitary and alone on a route over which three or four and twenty thousand holiday seekers had passed during the season just ended, drawn along chiefly by the enchanting dreams of the great author. We thought of Scott, and we quoted Scott, and we crossed ourselves at the name of Scott, and we never wondered more at the vigor and breadth of his fancy. The monument at Edinburgh seemed none too large.

As we could not go up the lake we retraced our steps over the route we had come. The return trip failed to remove the disappointment we had experienced on our first view. The high rolling moors increased a little in altitude, and their soft, graceful curves and velvety surface showed more impressively after our higher expectations had subsided.

But the mountains failed to rise. There they were, fat lumps of hills, very rocky and often precipitous, over which Fitz James certainly never did ride that "gallant grey." He might have got over the moors from Stirling, but, as a matter of fact, we agreed with Mr. Gradgrind that he never could have got round to the far side of Ben Venue in the period allotted to that chase. We all felt every disposition to render more than justice to Mr. Scott, and acknowledged the wonderful genius of the great poet in peopling these barren regions with the children of his imagination. We reverently declined to suggest a doubt that any one of them could have failed to do the deeds ascribed to him. Only Mr. Gradgrind resolutely reflected the story of the ride, in which opinion we reluctantly yielded a painful concurrence.

The new hotel at the Trosachs is a very ornamental structure, in which convenience is sacrificed to show. Two high circular turrets rise at the ends of the building, with conical roofs covered with slate, and the stable looks like a fortress. Everything is castellated and nothing is convenient.

In anticipating the glories of the Highlands of Scotland, one should not expect them to be more than their name imports, namely, high lands. They are in no sense mountains. They are two or three thousand feet above the sea level, but half this elevation is overcome before we get to their base.

Like the wide, high-rolling moors, which seem to be half as high as the Highlands themselves, they are without trees or shrubs even. Along the foot of the hills and through the broken passes a growth of white birch, larch and fir, and occasional oaks are found. Timber of various sorts grows where the streams spread out through the various intervals, but the great characteristic of the landscape is nakedness and barrenness. The heather asserts its empire everywhere, and the whin, or furze, and juniper and fern spread over the thin and reluctant soil.

We meet here the Highland cattle, a breed of small, compact, rugged animals, with great horns and long shaggy hair, and looking as if they might be sheared to advantage. These animals are taken from the mountains to be fattened on the lowland pastures, and though they are very small the beef they make is so highly esteemed that it brings a higher price in London than any other.

It seems to be of a similar excellence to that made by the rich pastures of southern Pennsylvania out of the starveling little Maryland cattle, driven up annually in spring, to be sold to the farmers of Chester and Lancaster counties. But this beef, though unsurpassed in flavor and excellence, never yet has borne a corresponding price in our metropolitan markets, for the want of a just appreciation of its merits. By and by the Philadelphians and New Yorkers will be as wise as the Londoners are in regard to their Highland cattle.

Here, too, we have the black-faced Scotch sheep, an esteemed breed, and good for both wool and mutton. They look lithe and plump and healthy. But nowhere, either in England or Scotland, have we found better mutton than is grown on the seacoast of Maine and the mountains of Virginia.

Callander, the present terminus of the railroad to the Highlands, is in a pituresque situation. Two large mountain streams form a junction here, and flow through a plain in front of our hotel at a rapid rate. A little way up the road one of them issues furiously from the hills and lakes above, and is crossed by a bridge, from which there is a good view of the now swollen waters. A little back the ground rises, and pleasant villas here and there show themselves, and a forest skirts the hills. All the soil of the low grounds is excellent and highly cultivated, for if there is anything in which the Scot is an adept it is in the management of his land.

The wants of the population constantly outgrow its capacities, and after these are tested to the utmost there is a large annual overflow of people into foreign lands who cannot find sustenance at home.

In the time of the Romans this country had a native population whom they called Picti or Picts, from their habit of pricking figures on their bodies by means of burning with a sharp-pointed instrument. These distinguishing marks were found on the bodies of the slain on the fields of battle. Hence the name Picti or Painted given to them by Tacitus and the Romans.

The writers of the country who followed wrote this term Picts, Piks, and Picks.

Hence we draw an inference that when the fashion of surnames began to become general, which is hardly more than 500 years ago, some of these Picts or Piks, who had drifted into England, were distinguished by their national appellation, and that hence has come the surname of Pik or Pike. This was the case with the English who moved into Scotland. They were called Englice or English, which soon got corrupted into Inglis, which is now one of the oldest surnames in Scotland or even in Britain.

The City of Glasgow.

The original inhabitants are held to have been that numerous and warlike race who repelled the Romans, driving them first beyond the wall of Antonine, running from the Frith of Clyde to the Frith of Forth, and afterward beyond the Solway Firth and the wall there built by Hadrian first and by Severus afterward, which extended across the country to the Tyne, or Newcastle. Twenty-five thousand tourists annually go up Lake Katerine to see where Roderick Dhu and Rob Roy played their pranks, but how many visit the seat of modern Scotland's true pride and glory, Glasgow and the Clyde? Who sings of the wonders of which she is the theatre—her finished agriculture, her amazing mechanical and manufacturing development?

Look at this prodigious city of Glasgow, with its 400,000 inhabitants, and its outlying appendages extending twenty miles to Greenock and the sea. Observe this vulcanic population, headed by its merchant princes and master mechanics, covering the ocean with its fleets, and crowding its steamers into every port of the civilized world. See them constructing pleasure ships for the Pasha of Egypt and ironclad rams for the Sultan, blockade runners for rebels; supplementing the naval and mercantil marine of the world everywhere at a cost which defies competition.

The Bay of Greenock is wonderful for its beauty. It is encompassed on every side by the towering highlands, with Ben Lomond in full view from its upper waters. The scene between Glasgow and Greenock almost rivals the commercial animation of the Thames, and its land beauties are immeasurably superior. Here is every variety of landscape. Plain and slope, warm hillsides, and smooth-shaven lawns, crag and glade, and barren hillside, all intermingled. Those lofty sugar-loaf rocks, known as the Dumbarton Crags, have been used as fastness and fortress for a thousand years. But the poets seem to have all lived on the Edinburgh side, and the beauties of the Clyde are comparatively unsung.

Yet Glasgow is blear-eyed. Its laboring population look hard-featured and scrubby. Ragged children and barefooted women disfigure the streets no less than the swarms of that unhappy class who live by debauchery, whose repulsiveness never seems here to be relieved either by grace of person or beauty of feature. The streets of Glasgow at night are a dismal spectacle even compared with London. Lake Lomond is a channel of deep water, lying in a mountain gorge hardly wider than the river Rhine. The scenery is bold, and the lofty hills are, as elsewhere in this country, wholly bare. They are sometimes rounded and clad in the velvety mantle which marks the high moors, but oftener rugged and rocky, especially toward the head of the lake. We see Ben Lomond in full view, and it never fails to be the most conspicuous object on the way up and down. It was particularly so now, for its top was white with snow, as were some other very distinct peaks beyond the lake.

Loch Lomond is not unlike the Lake of Geneva in miniature—the same abruptness of outline at its upper end, and the same abatement of these features toward the outlet. But on the hills of Loch Lomond nothing grows except the heather, while on those of Lake Leman the picturesque vineyard clothes much of the surface. Still, Loch Lomond is beautiful, and the charm of romance thrown around it enhances its beauties.

The numerous islands which we circumnavigate in making our various landings on the lake are comparatively low, and the largest are in forest, especially that which is the burial place of the McGregors.

Leaving our water communication for the cars we found that the weather cleared in time to give us a sight of that world-renowned view from Stirling Castle. This castle is only a little over two hundred feet high above the plain, but the view is incomparable. It is difficult to find its equal in Europe. The castle is at the foot of the long vale of Monteith, which stretches away for thirty miles, with a width of four miles. This is bordered by a highly cultivated country, rising into the Highlands in the distance. The vast sweep of view shows every variety of plain, hill, mountain, and river. Our way from Sterling lay up this lovely vale of Monteith, and gave us the best possible view of the Highlands we had visited. They were in full relief for an hour while we skirted the noble valley at their feet.

After leaving Scotland, our next objective point was the lake district of England, into which we very soon run. Our ride to Penrith was through a well-cultivated, rolling country, it not having lost its Scotch characteristics. This we soon left and entered upon the moor lands, now "Westmoreland," where the way was rough and the country piled full of the round hills of coarse gravel and rocks which give it its name. This "moor" country is good for nothing for cultivation, not even in the valleys, and furnishes but a poor sustenance for the sheep which feed upon it.

We now made our first acquaintance with Skiddaw, the loftiest and most renowned of the mountains of the Lake district, which here reared its rounded form upon our right hand. The aspect of the country is not unlike the rougher parts of New England, only there is less forest. Its picturesque appearance improves as we approach Windermere.

The great peculiarity of this lake is its double and triple outline. The first embraces the lower and cultivated lands, the next the moors and hills, and the third rises to the summits of the more distant mountains. In this it is very different from Loch Lomond, where the land rises abruptly from the shore in bold outline to the highest visible peaks. Windermere is beautified by the cultivation upon its banks, while those of Loch Lomond are naked, precipitous, and barren. Leaving the hotel in the town of Windermere, we drove up the side of the lake, passing through Ambleside to Rydal Lake. The plain, old-fashioned two-story house of Wordsworth, and the ways leading to it, are embowered in an excess of shrubbery, whose thick clusters of deep green can only flourish in a climate too humid for an animal organization that seeks the sun. This excessive humidity covers the stone walls along the roads with moss, and gives wonderful vigor to the ivy, which grows and climbs everywhere, covering the houses to their roofs. It is the source of that intensely novel aspect which the country here everywhere wears. Our climate in America nowhere admits of such results, which lose much of their attractiveness when the penalty paid for it is taken into consideration. It is a country which does not know the luxury of the cloudless skies and the warm sunny atmosphere which is our inheritance.

We have found for the first time in England that the principal deciduous tree of the locality was the beech. Along with it was a smooth-bark hemlock.

It was impossible to go through Ambleside without attempting to see the most eminent of living English women, Harriet Martineau. She enjoys a green old age, constantly busy with her pen, as the columns of the daily papers attest and the reviews and magazines bear witness. But her growing infirmity of deafness takes away the pleasure of intercourse with strangers, and she resolutely secludes herself from all company. She however confessed to feeling "the deepest interest in America."

Among her numerous productions she has written an elaborate and entertaining guide book of this region.

A Return to Paris.

The Pantheon at Paris is a magnificent pile. It has small accommodations in the way of chapels, having but three altars, one at the end of the three arms of the cross, whose shape the edifice forms. This cross is nearly of the Greek form. The building has far more light than the Madeleine, the arches at the ceiling in each transept forming semicircular windows. The sides of the columnar portions of the dome are also windowed. The style of the circle is Roman and the pillars of the Corinthian order, and there are over thirty of them in each arm of the cross. The entablature they support is heavy and highly ornamented. Over each arm is a flattened dome in small panel work, with grained arches light and graceful. It has no sculpture and only a few paintings, which are not in frames, and seem to be present on sufferance.

Its most remarkable feature is the double central dome; the lower of the two being open like that of the original Pantheon, and covered with a loftier one, whose interior is frescoed.

The general appearance of the church within is extremely noble and imposing. Its chief disfigurement is the succession of gilded Ns under the dome, which the usurper, whose name they typify, never lost an opportunity of thrusting in the face of the world.

Notre Dame has been undergoing the process of restoration since 1861, and its ornaments are all removed.

It is a prodigious structure, for the most part one vast floor of an oblong form, only broken by columns. The ceiling of the nave is enormously high, but the pillars are not so, as there is a gallery, and still a tier of windows, above that. The whole church is Gothic. At present it is without ornamentation of any description, but there are a few beginning, which indicate that this state is to follow the more substantial restorations, which now seem about completed. The lofty nave and the two great oriel windows are the principal interior features that impress the beholder.

The Gothic architecture is not here seen, however, in anything like the vastness of proportion that is exhibited at Antwerp and Cologne. The pillars are comparatively short, and not imposing. Still it is a prodigious edifice, and especially so in its broad interior roominess, where a coach and four could well be accommodated, and in its exterior appearance, the huge towers dwarfing everything in their vicinity and rivalling, if not surpassing, everything of the kind in northern Europe.

The vast length of the nave and choir is only to be comprehended by a close observation.

The length of the church is 390 feet, height of vault, 102 feet; towers, 204 feet; diameter of oriel windows, 36 feet; width, 158 feet.

The exterior ornamentation, which is elaborate, is being restored to the condition it was in before the fury of Parisian mobs and revolutionary successes had left their mark upon it.

The Parisian mobs have rivalled the most devilish of mankind in many of their acts, but their assaults upon priestly domination are only worthy of praise.

The history of France may be had in the statues of Paris.

The great men of the nation are all here and many of the eminent women. The latter are found in the gardens of Luxembourg to the number of thirty, beginning with Ste. Clothilde, A. D. 543, and coming down to Anne of Austria, in 1666.

The statues of the great men throng the courts of the Louvre, where they number eighty-six. In its galleries and on the front are found many others. At the Hôtel de Ville is Charlemagne, and in the niches on the face of the edifice are forty-six statues of distinguished Frenchmen.

Many of them find duplicates in the court of the Louvre, others again are found within the Luxembourg palace, and at the Church of St. Denis are the long line of figures, busts, and funereal monuments of the royal families of France.

St. Sulpice is another marvellous structure. In critically examining this church or that of Notre Dame, or the Pantheon, it is the last one visited which always excites the highest admiration.

This church has the square pillars and the Roman arches, and is highly ornamented in its sculptured decorations as well as in frescoes.

It is of vast size, and yet does not seem to be so long as Notre Dame, although really forty feet longer, and its width at the transepts is likewise greater, but the great square pillars occupy much room and break the effect.

St. Sulpice is remarkable for its gorgeous gilded chapel to the Virgin and her panoramic representation among the clouds. It has also decorated and frescoed chapels to Ignatius Loyola, St. Charles Borromeo, and Vincent de Paul, the latter attending the deathbed of Louis XIII.

The Pantheon stands on a high hill, the streets descending to the river toward the Halle des Vins, having quite a steep descent. In the general process of levelling going on in the city it is hardly too great an extravagance to expect to hear some day of the Pantheon's "expropriation" in order that the uniformity of level may reign in its place. There is seemingly no end to the destruction going on all over Paris in order to make way for the new streets and boulevards. The old St. Germain quarter, which is well built, with generally commodious streets, and not being infested with a revolutionary population, escapes the general demolition.

About the Pantheon and the Luxembourg the new Boulevard Sebastopol is adding greatly to the attractions of the vicinage. It is already one of the most eligible parts of Paris for a resident. There are the Sorbonne, the Hotel Cluny, the Library of St. Genevieve, the Luxembourg gardens and palace, the Pantheon itself, St. Sulpice, the College of France, and a little way off Notre Dame, the Hotel de Ville, and the Jardin des Plantes.

The Closerie du Lilas, which is in this neighborhood, is a great dancing hall and garden, peculiarly French and peculiarly Parisian. Here for a franc one may see, three or four times a week, the most tremendous display of extemporized dancing he ever conceived of.

This national peculiarity crops out here in all its luxuriance. Two or three hundred couples may be seen on the floor at once, exhibiting fantastic antics of frenzied zeal in this amusement, until the senses reel with the excitement which rises at times to hysteria.

The girls are all of easy virtue, and, as a body, it cannot be said they have great attractions, though sometimes a pretty face is seen among them.

There is an edifice in Paris, a very elegant building as well as extensive, on the front of which is a sign, and another in the rear, on which are written "Corps Legislatif."

In our country, in England, the great halls of the nation's legislation are the most interesting objects that the traveller visits. They are filled with cherished memories, and their presence seems to testify to the vitality and independence of the national life as nothing else can.

In Paris you pass the building by, as though it was a barrack or an imperial stable.

You look at it, feel instinctively that it is nothing and means nothing, and pass by with something more than indifference.

You feel that it is a pretence and an imposture.

You find two-cent reading rooms in the porticos, where newspapers are vended in Paris. There is one at the Odeon Theatre, in front of the Luxembourg Palace.

It is three feet deep and seven long, and I have seen seven persons seated in it at a time, perusing the daily journals. They each paid two sous a sitting, and read as much as they chose out of a half-dozen or a dozen papers.

This, for souls bent on economy, by choice or necessity, is better than buying the papers at three cents apiece, which is the current rate.

If one does not like this arrangement, another is offered to his hand. He may stand by the vender and have the reading of any journal he may select for the price of one sou.

St. Germain.

OCT. 8, 1864.—Went out by rail to see St. Germain. It has never been occupied by the Kings of France since it was given for the residence of James II. of England, after the revolution of 1688. James lived and died here in 1701, and a monument is erected to his memory in the church opposite the palace.

Louis XIII. died here, and Louis XIV. was born in a small two-story house or chateau just in the rear of the palace.

After James's death, during Louis XV.'s reign, the palace was converted into quarters for the troops.

Versailles being now built, and in its glory, Napoleon used it for a military prison, and of late it has been allowed to go into disrepair.

The work of restoration is begun, and the edifice will reappear in its original splendor.

There is a great forest of 8,000 acres, and it offers a pleasant resort both for visitors from Paris and for the residence of people of money who wish to live in the vicinity of Paris.

The famous terrace begun by Henry IV. and finished by Louis XIV. is a long wall fronting the forest, built on the crest of a hill apparently a mile or two in length. It is ordinary masonry on an uneven surface, sometimes high and sometimes not.

It was constructed at a vast expense, for which the results obtained do not compensate, though the ride along the esplanade furnishes an extensive view, and is called one of the finest in Europe. The Seine flows in front, with meadowed banks, which give it a beauty that otherwise would be wholly wanting.

The names adopted by the trading shops of Paris exhibit a curious taste. One is called the "Little St. Thomas," another the "Good Devil," another the "Poor Devil," another the "Deux Magots," and yesterday I saw one called the "Infant Jesus," "price fixed."

At Richards's, in the Palais Royal, you will find a good dinner for two francs. The saloon is spacious and ornamental. The table cloths and the napkins are fresh and clean, and bright gaslights illuminate the apartment.

You get a good pea soup or a Julienne soup, a plate of fresh salmon with white sauce, a good cut of beef braisé in Madeira, excellent bread, an unexceptionable méringue, and a cup of café au lait, with half a bottle of claret, vin ordinaire, all for forty cents Federal.

Or, if one chooses to omit his coffee and have a plate of chicken, he can have that at the same price, and he can vary his daily fare to suit his taste. All I can say in behalf of this cheap café is that I wish I may always be sure of finding such a one in every city where I may temporarily sojourn.

The difference between London and Paris is this: In London everybody is going somewhere; in Paris everybody seems to have arrived.

London is regarded as a place to get out of; Paris as a place to get into. Much of this is owing to the love of isolation among the English and to the gregariousness of the French, who love company above all things.

An Englishman at dinner to-day said if his affairs in London were closed and his daughters all fairly settled, he would go live in Paris.

I thought I could see why, but I do not think he knew himself. He was of a social temper.

In England, besides the absence of social equality, the pressure of the aristocracy is the bane of city life.

Paris is great on spectacles.

For any kind of a show the whole population will turn out, and on a fine Sunday in autumn the numbers are amazing. Nadar, the Barnum of photographers in Paris, had lately an enormous balloon constructed, and he inflated it on the Champ de Mars and went up with it on a Sunday, taking twelve others with him.

The balloon was as big as the dome of the Invalides or the Pantheon, and, they said, took 20,000 yards of silk to make it. It carried a small house under it, 10 feet by 20, and on its flat roof, surrounded by an enclosed railing, stood the company.

They were a greater number than ever undertook an aerial voyage together before, and, the balloon being correspondingly great, it was enough to bring out all Paris. The people half filled the Champ de Mars, they surrounded the square, and quite filled the streets and covered the housetops. Nobody knows how many. The balloon had hard work to rise at first, and made two or three ineffectual starts, but finally got off and rose majestically. M. Nadar climbed up into the rigging above the car, and swung his hat as he sailed away.

The balloon drifted off before the wind directly over the city for about five minutes, when it began to descend, and came down behind the houses and was out of sight.

The whole spectacle did not last five minutes. But for this all Paris turned out, and tired themselves to death in going, standing, and returning, for not an omnibus or voiture was to be had for love or money.

The military were put on duty, and squads of infantry and squadrons of cavalry perambulated the enclosure and its environs for hours. Vive la spectacle!

He made a second ascent two weeks later, when he came down in a general wreck in the kingdom of Hanover.

Paris is the resort of all the rich, halt, lame, and blind, and it is the paradise of cripples and children. The Champs Elysée is the home of loafers of high degree. I never saw so much old and maimed gentility. Here a half-paralyzed woman leaning on a maid, with a servant in livery at her heels. There a man hitching along on his canes, followed by his servant, in gloves and a coat that sweeps the ground, and so on ad infinitum.

Our life in Paris is the *déshabillé* part of our European experiences.

I go there as I go to "camp out" when I am at home in America. I tumble into a French family, where all is in common, and where I have not even a parlor to myself.

I sit on trunks, and am only master of the ground I stand or lie on. We all huddle round the dinner table as thick as three in a bed, and as jolly. Monsieur and Madame are models of good nature and substantial virtue, and have that peculiar French characteristic of love of gregariousness which somehow imperceptibly spreads when one gets where it exists, more especially when one is among the French.

SECRETARY GRESHAM'S FATHER.

Major Mulky of Indiana Relates How Sheriff Gresham Was Killed.

LOUISVILLE, July 7.—The Hon. Walter Q. Gresham has just returned from a visit to his aged mother at Lanesville, Ind. It is his custom to make at least two trips a year to his boyhood home. This year he came to Louisville last Wednesday night, crossed over to New Albany immediately, and, hiring a team and driver, went at once to Lanesville. His mother is now 89 years old, and has been in bad health, but was better when he left her last Friday.

Secretary Gresham practised law for many years in New Albany, the thriving manufacturing city just across the Ohio from here, and always takes occasion to call upon his old friends when on these journeys of duty and affection. His life has been such a busy one for many years that his visits have always been hurried, and he has left unviewed many of the most interesting scenes of his early life. Short as was his stay this time, he managed it so as to include an hour at Bloomington, Ind., where he attended college when a boy. He arrived there last Wednesday afternoon, and luckily found an old friend, Major Mulky, on the platform. He told the Major he would like to see how many landmarks remained in the town that he could recognize. He was taken to the spot where once stood the "Orchard House," where he boarded for several months. The house was destroyed by fire many years ago. He found still standing an old two-story frame dwelling once occupied by Elijah Goodwin, in whose family he was a boarder for some months. He was greatly delighted to find this landmark preserved, and said it forcibly and pleasantly revived the memories of his college days. Bloomington is the seat of Indiana's State University. The college records show that Gen. Gresham was a student there in 1852-53. It is a curious fact that the Hon. John W. Foster, Gresham's predecessor as Secretary of State, studied at the university and was graduated in 1855.

Major Mulky has been Judge Gresham's intimate friend for many years. In a conversation to-day the Major told an interesting story, which is not generally known. The Major's father was a neighbor of Gen. Gresham's father in Harrison county, and was one of three men who arrested the murderer of the elder Gresham. Major Mulky told the story of the murder as follows:

"The first name of the desperado who killed Sheriff Gresham I do not recall. His name was Sipes, and I distinctly recollect that he had a brother named Levi. Levi's brother had just been in a very ugly scrape, and had shot, but not killed, a constable who tried to arrest him. As Judge Gresham's father was then Sheriff, it devolved upon him to arrest Sipes, who was known as a dangerous character. To help him he summoned my father, the late James Mulky, and James Spencer and James Gibbs. It is a little curious that the first names of all these was James.

"Sipes was at a dance a few miles west of Corydon, but the party went first to the house of his father. Their inquiries alarmed Levi Sipes and he fled at once to give his brother warning. He found him dancing and had just time to tell him what was up when the Sheriff and his posse arrived. Sipes swaggered out into the yard, and when the Sheriff attempted to execute his warrant the desperado drew a pistol and fired. His aim was good and the wound inflicted was fatal. The Sheriff did not stop, however, and Sipes, drawing a big dirk sprang upon him and stabbed him to the heart, killing him instantly. He turned and fled, but was pursued by Mulky, Gibbs, and Spencer, who finally captured him at Fredonia, then the county seat of Crawford county, on the banks of the Ohio. This occurred in the winter of 1832-3, and I distinctly recollect that there was snow on the ground, by the aid of which I helped track Sipes. He was tried in 1833, and, escaping hanging by great good luck, got a twenty-one-year sentence. I do not remember how it was that he got off so easily. He stayed in prison until 1837, during which year he was pardoned by the Governor. I don't remember who the Governor was, but he was either Noah Noble or David Wallace.

"Sipes returned to Harrison county immediately after his pardon. For a while he pursued the same desperate life, and was a terror to the citizens for months. Suddenly his manner changed. To the astonishment of every one he became a quiet citizen. He remained a year or two longer and then disappeared. In 1848, while on a visit to Ottumwa, Ia., I met Sipes, and by invitation took dinner with him. He was a quiet, reputable citizen and owned a large and valuable farm. His home was comfortable and had every appearance of prosperity. I never saw or heard of him again, and it was only Judge Gresham's visit here that recalled the occurrence to my mind."

THE GERMAN WAR LORD.

EMPEROR WILLIAM'S PASSION FOR MILITARY SHOW.

The Daily Review on the Tempelhof Parade Ground—Soldiers "Worked to Death" by the Imperial Enthusiast—Distrust in the Judgment of the Young Monarch.

From the St. Louis Globe-Democrat.

BERLIN, May 20.—Not the least remarkable thing about Berlin is the Tempelhof Parade Ground. Here are 3,000 acres of land set apart since 1721 for purely military purposes—it is a parade ground and nothing more—just upon the edge of one of the newest and most rapidly growing parts of the town, where land is worth so much per square foot for building purposes. The speculative builder has, in this case, to give way to the practical soldier, and the German taxpayer, one of the most heavily burdened mortals now extant, sees himself obliged to provide a space upon which two respectable armies may manœuvre, and sometimes do. We were too soon for the great spring review, which occurs near the end of May, but you can never in Berlin be too soon or too late for a military spectacle of some kind.

We had a spectacle from our windows opening on the Wilhelms Platz every morning if we chose to get up to look at it at 6 o'clock. The garrison of Berlin is a restless body and some part of it is forever in movement—infantry, cavalry, and perhaps artillery most frequently of all. Lest we might miss it, or lest the good Berliners should forget they are in a state of semi-siege, or lest they should sleep too late, the troops have a band with them at this early hour, and magnificent bands they are. No better, if so good, martial music is anywhere now to be heard. So we did not mind being waked up, any more than the little world of foreigners at Homburg last year minded. There, also, at 6 o'clock or earlier, troops were under arms and bands playing. It did not signify whether you minded it or not. The convenience of the military, not of the civilian, and least of all the foreigner, is considered first of all in Germany, and most of all in Berlin. Later in the day are to be seen the regiments coming back from their morning's work at Tempelhof, the Emperor at their head, perhaps. And there is no hour in the day when you may not see some sort of military procession, all in the way of business and as part of the regular operations of the army in time of peace.

THE EMPEROR NOT POPULAR.

The Emperor's appearance on these and other occasions still excites curiosity and interest. Nobody is visible so often in the streets of Berlin. People stop to look at him, and some of them take off their hats. There are no cheers. He is greeted with civility; of enthusiasm there is none. He is not popular, and he is not trusted. "Nobody knows what he will do next," observed one of his subjects, by way of summing up the general feeling toward him, and the general anxiety.

The Emperor, as all the world knows, takes himself very seriously in all his imperial capacities, and in none more than as a soldier. He lives at Potsdam in the New Palace. He is in the saddle every morning at 6, rides in to Berlin, sixteen miles, and out to Tempelhof, which he reaches at 8, when a review begins, lasting till 1 o'clock or later. At 2 he goes to lunch, or perhaps it is dinner; at any rate, a solid midday meal. After these seven or eight hours on horseback and of hard work drilling and manœuvring, and after his solid 2-o'clock meal the ruler of Germany thinks himself in proper condition to attend to affairs of State. He attends to them or not, as he sees fit. The business of State, which has to wait for his imperial Majesty's attention, is for the most part very much in arrears. He is not a good man of business, and not methodical.

The State, in fact, or the empire, seems to be to the Emperor a kind of diversion from the serious business of his life. The serious business is the army. That is one view. On the other hand, there are Germans who will tell you that the army is the Emperor's toy. It really does amuse him to devote five or six hours a day to the duties of a drill sergeant. Drill, manœuvres, dress, the least details of military life, afford him an infinite delight. Did he not the other day issue another of those military encyclicals for which he is famous? These solemn documents bear on various subjects relating to the business of soldiering—sometimes duel fighting, sometimes beer drinking, both of which pastimes his imperial Majesty encourages by precept, if not by example. This time the exhortation of the Hohenzollern monarch related to the wearing of pointed shoes and of high collars, both of which his imperial Majesty strongly disapproves and discourages.

We were told we ought to see one of these morning drills at the Tempelhof, and we did. To witness the great spring review is the privilege of a few. You may not happen to be in Berlin at the right time, and if you are it is a matter of high diplomacy to get permission for a carriage to go on the ground, the best or perhaps the only good way of seeing the performance. There is a tradition in Berlin that Mr. Phelps once drove out on one of those great occasions with a procession of seven carriages, each containing four or more of his countrymen and countrywomen, so that some thirty Americans were privileged to look on while the German army was inspected by the German Emperor, or so much of the German army as constitutes the garrison of Berlin and Potsdam. This was a distinct triumph for the United States. No Ambassador had ever more than four carriages, and no other Minister so many as four. It was one more proof of Mr. Phelps's talent for diplomacy, a talent which the diplomatist has so often to display, if he can, in little things as well as in great.

SOLDIERS WORKED TO DEATH.

But on ordinary mornings anybody may venture not on but to the edge of the parade ground, and get a very good view of what is going on. E. and I drove out, not indeed at 8, but toward 11, which was in good time for the manœuvres. The three hours' inspection and drill we were willing to take for granted. I dare say the soldiers would have been still more willing. "They are worked to death," was the remark of a military expert, "and so are their officers." It does not seem to occur to the imperial enthusiast who presides over their destinies that everybody may not have the same passion for playing at war which he has, nor the same degree of physical energy. There are, however, not a few Germans who fear lest the play be only a preparation for war in earnest. These daily drills and manœuvres are a new thing. It is a new thing for a German Emperor to inspect in person and command in person regiment after regiment, as if to assure himself that every part of that immense machine which goes by the name of the German army is in perfect order and ready for immediate use. Does he mean it for immediate use?

That is the question which men are anxiously asking themselves, and sometimes each other. The Emperor's ambition is without bounds. His confidence in his own military capacity has no known limits. His technical knowledge is large. He certainly does understand his trade as a soldier and would, in the opinion of competent judges, be an excellent commanding officer of a regiment, probably a good General of brigade; perhaps a sufficient General of division. Will any competent judge go further than that? Can it be said of any officer till he has been tried in actual war that he is fit to command a corps d'armée? Can it be known whether he can handle an army on a field of battle? Napoleon, it is true, had never commanded more than a few battalions when he planned and executed that wonderful first Italian campaign which he never surpassed. But is it absolutely certain that the Emperor William II. is a Napoleon? Is he even a Frederick? He may be both, but how is one to know? The number of Generals who have proved themselves fit for war on a great scale is not large. It is never large.

TALENTS FOR DETAIL.

The Emperor's talents seem to be talents for detail. He does not take broad views in politics. He might not take broad views in war. It makes one think of Moltke's remark that he was not quite sure he could set a squadron in the field. That the Emperor can do, beyond dispute. That he can also conduct a campaign is his own conviction, which not all those about him share. Hence the apprehensions at which I hinted above. The Emperor longs for all kinds of fame, and for military fame most of all. He is thought, rightly or wrongly, capable of plunging two nations into war in order that he may win this military fame. No doubt he would do it conscientiously—that is where the danger lies. He can always persuade himself that he has a divine command.

The old Emperor was content to leave the conduct of military operations in the hands of the staff, of which Moltke was simply chief. It is not believed that this young Emperor will do so, and if he did there is no longer a Moltke. The new chief of staff was chosen by Moltke, but if the Emperor prefers to be his own chief of staff, as Gen. Grant sometimes did, who or what can prevent him? No man can say whither the spirit of adventure, coupled as it is with no misgivings as to his ability to play any part, may lead him. The Emperor of Russia excepted, no man living wields such power as this precocious Hohenzollern. The Emperor of Russia, however, is amenable to advice. The German Emperor notoriously is not, whether in lesser or greater affairs. He will not harken to the experienced officers who hint to him that he is overdoing it with his soldiers; that mere human flesh and blood, with no divine right of Hohenzollern lineage to fall back on, is not equal to the task and the works he sets.

One result of this procedure struck me as ominous. That 2 o'clock dinner lasts, for the officers, the greater part of the afternoon—is sometimes not over till 6 or 7 in the evening, said a friend who knows the army and its ways. Men who have been on parade and much hustled about from 8 in the morning till past 1 become hungry and thirsty. The dinner is a copious one and the drinking heavy, both during and after dinner. And what do you suppose is the fashionable beverage of the smart German officer of the Guards to-day? Champagne and port, mixed. It makes one think with a shudder of the absinthe which softened the French brain under the empire which collapsed in 1870.

AT THE TEMPELHOF.

These gloomy forebodings seem, I admit, out of place in the Tempelhof and in the sunshine which bathes the broad plain and flashes back from steel and from gold epaulets and from a thousand polished surfaces. The parade ground is cut in two by a public road, along which the public is allowed to drive, taking its chance of being swept away in a charge of cavalry. There are carriages and cabs, and either side of the road is lined thinly with spectators. You come upon the scene as suddenly as if a curtain had gone up, for you pass in a moment out from among the streets of Berlin into the country, and on each hand the smooth expanse of the Tempelhof stretches before you. It is an almost level plain, dipping here and there into slight hollows, and rising on the left into a hill. Nearer, on the same side, is a wood.

There were, as far as one could judge, two regiments of infantry, nearly all on the right of the road, as we drove up; there was a body of cavalry on the crest of the hill, and, as presently became evident, a force in the wood. Mounted police kept the line; troops excepted, nobody was allowed on any part of the ground. To the left, between the wood and the road, was a group of horsemen, and in the centre of the group the Emperor. He had about him a staff that might suffice for the commander of an army on a real field of battle; plumed Generals and scores of gilt officers of various grades; the military members of various embassies and legations in Berlin completing the company, while mounted orderlies hung on the outskirts and at every moment galloped off with messages for the forces engaged. The mimicry of war was perfect. The Emperor was but dimly visible from where we were, and if in our eagerness to behold or even to identify the imperial face and figure we ventured a foot upon the turf, a mounted policeman rose out of the earth to warn us back with equal firmness and civility, for never once did I hear in Berlin or elsewhere in Germany a rude or harsh word from these panoplied guardians of the public peace. "Would you have the kindness to keep in line with the others; I am obliged to ask you." Such was the address of this gallant officer, mounted on a gallant gray, who rode slowly up and down the front of the spectators.

However, we knew the Emperor was there and could imagine the features we had seen before—the hard face with its self-contained and self-satisfied look, the eyes too near together, the expression of unrest, the air of irrepressible vigor, which makes him seem always to be wanting to do something else; the critical gaze fixed on his troops which forgets to note no fault, no mistake, no speck on any button, no wavering in the line which ought to be drawn across the field as with a pencil and a ruler on a sheet of paper. I imagine there is not much fault to be found, yet they say his Majesty never omits to summon about him after a review the Colonels and field officers of the regiments and General, if there be one, and read them, one and all, a lecture on the art of war and on their shortcomings in the exercise of the morning. He is a terror to his own soldiers, whatever he may prove to be to the foe.

A SERIOUS BATTLE.

In the next hour we saw a battle; acted from beginning to end with a sense of reality and seriousness which the theatre never gives you and no written account can express. If it was not on a great scale it was perfect in each particular and a spectacle of extreme beauty. Seldom is it in actual war than any one beholder or actor can grasp the whole scene, but here the whole was as plainly visible as if, in truth, it were a performance on the stage. They were no puppets or marionettes, but real men; no amateurs either, or militia or mere show troops, which one often has to call the English; but an integral portion of the most tremendous military force in the world, with the prestige of victory on its banners. Under the scrutiny of those piercing imperial eyes no man dared to do his duty less seriously than if the contest were real; it was real to him; to the officers above all. Everything was transacted with the utmost energy and precision of which the trained German soldier is capable.

The business they were set to do presently became plain even to the eye of the civilian. The wood on the left was held by a defending force, invisible to us or to the attacking troops. The battalions massed on the far side of the road were to carry it if they could. It was beautiful to see them set out upon this little campaign. The compact masses of soldiery slowly shook themselves into open order. The squares and columns formed into line, duly distributed into advance guard, main body, and reserves. A company of skirmishers broke suddenly loose from the front, scattered, ran forward, fired, and dropped on the ground. At first they attracted no attention from the enemy, who, on his part, kept fast to his wood, half a mile away. They sprang up after a minute and ran forward again, followed at a distance by the advance guard, whom in turn the main body followed, the reserves standing fast. When this movement was perceived from the wood volleys broke forth, and the assailants dropped again when they had delivered their volley in reply.

There was something uncanny and incomprehensible about the whole proceeding. From both wood and open field came crash after crash of musketry and no smoke; they were firing with the new smokeless powder. It was quite evident at once that smokeless powder had its drawbacks as well as advantages. You see better, but you are also seen better. The attacking body on a ground which afforded no cover whatever was simply a target for the skilled riflemen in the wood—a target which spread over a great space, in a blaze of sunlight, in which glittered a thousand spikes on a thousand helmets, and every gilt button and steel scabbard and buckle and epaulet was a target by itself. The effect was as dazzling for us as it was dangerous to the troops themselves; the whole plain sparkled and gleamed and glowed with these innumerable points of reflected light. But skirmishers and their supports went steadily forward; the rush at the double quick was repeated as soon as the fire from the wood died away; and so many yards of ground gained and held at every rush. Presently the reserves also moved up. Almost at the same moment a body of cavalry flashed out of the wood, poured along the crest of the hill, and threatened the right flank of the advancing enemy. The right flank swung steadily around till it had ceased to be a flank and had become a solid wall of armed men facing this new foe, into which it delivered a hail of blank cartridges that sent the cavalry headlong over the brow of the hill, dismounted the guns of the battery which the cavalry supported, and cleared that part of the ground altogether. Once the cavalry and guns reappeared, but their fate was the same. They could not live under that fire and had to vanish.

AN IMPOSSIBLE CONTEST.

No more, I thought, could the infantry have lived long on that flat, uncovered field, had there been bullets in the rifles from the wood. Next us stood a little cluster of military critics, who commented freely, being out of the Emperor's hearing, upon all these transactions. When finally the infantry, advancing in line, reserves included, and skirmishers still well in front, swept on to the edge of the wood and into it and the defenders fled in the wake of their cavalry and artillery, I asked one of these gentlemen, plainly an old soldier, if, over such ground as that, infantry could ever have got near the wood. "Never," was his answer. The strength of the fire had shown that the force in among the trees was considerable enough to have annihilated the regiments outside. But if you do not know the conditions under which an engagement of this sort takes place, criticism is thrown away, and we, of course, did not know them.

It was possible to occupy the mind with something besides tactics to enjoy the brilliancy and animation of the scene, and to believe we had seen a battle in miniature, as we had. What is called a sham fight is often a meagre imitation of battle without interest or beauty or verisimilitude. This was so like the real thing as to make one remember the rather comprehensive remark of a soldier who is not German: "There are no soldiers but the German." Such remarks are not meant to be taken literally, they are only a form of the superlative, only a note of admiration. Whether the Germans are still the best troops in Europe is a point on which, with or without the Emperor's help, the world will presently have an opportunity of forming fresh opinions.

THAD STEVENS'S IRON MINES.

Believed for Forty Years to Be Extremely Rich, They Prove Worthless.

HARRISBURG, July 8.—Many years ago Thaddeus Stevens purchased a large tract of land on the South Mountain, in Adams county, which was believed to be extremely rich in iron ore. He erected furnaces on the tract, and the Caledonia furnaces obtained a wide reputation. Mr. Stevens invested large sums of money in the plant, and when the rebels invaded Pennsylvania in 1863 one of the first things they did was to burn Stevens's furnaces to the ground and do all the destruction they could to the rest of the property, such was the Southern hatred of the unrelenting Abolitionist leader and anti-Southern statesman. Stevens was then a resident of Lancaster, and when he was asked how much damage the rebels had done him at Caledonia he replied: "Damage? Why, they haven't left me a thing. Everything is gone but the debts."

Mr. Stevens never rehabilitated his possessions at Caledonia, but the popular impression of the great richness of the territory in iron ore remained. After Mr. Stevens died capitalists tried to purchase the property, but his estate was encumbered in so many complications, owing to the peculiar terms of his will, that the sale could not be effected until the estate was settled. That required more than twenty years. Then the Caledonia Mining and Manufacturing Company purchased the property, spent several hundred thousand dollars in building a railroad from Conococheague Island to Caledonia to haul the iron ore to market, and then tunnelled into the hill more than 500 feet to strike the rich beds of ore. To the surprise of the company they found scarcely any ore to reward them for all their labor and outlay, and now, after having made several drifts and shafts in other parts of the tract and finding no ore to speak of, they have abandoned their mines and closed their railroad. The venture cost more than $1,000,000, and, as it was entered into without any speculative idea whatever, but as a legitimate business enterprise, the result is one of the greatest surprises in the industrial history of the State.

THE ROADWAYS OF GERMANY

CHEMNITZ, DRESDEN, MAGDEBURG, NUREMBERG, BERLIN.

Fruit Trees Lining the Roads of Saxony—Pavements of Cast Slag Cubes—A Kingdom Without Fences Between Fields.

Saxony, if we may credit the unqualified and enthusiastic assertion of Consul Merritt of Chemnitz, has "without doubt the finest system of roads in the world." The kingdom, as is well known, is densely populated. Two centuries ago the Saxon roads were built with wood, like our American corduroy roads. In 1781 a very progressive road law was enacted, which, among other provisions, recognized the right of an owner to compensation whose land was taken to widen a road, provided he had to give up more than "so much as could be seeded with two pecks of Dresden measure." The roads of to-day have a rock substructure of broken stone carefully placed by hand on the smoothed and graded roadbed. The rule is to select stones of nearly equal size and place them tightly against each other, each with its largest plain surface downward, to prevent its working loose. Small fragments fill the intervening spaces, and are carefully wedged in and rammed down. Then comes the superstructure, of small broken stone, as nearly cubical as possible, and from the size of a hen's egg to that of a walnut, depending on the material. The road is then soaked with water, rolled, and finally covered with gravel, which is also rolled. The average of general repairs in State roads is but once in eleven or twelve years, on account of the continuous local repairs. Great care is taken in scraping off mud and removing dust from these country roads.

But it is the trees on the roads of Saxony that most strike and please the American. They make long avenues, stretching for miles, and are well selected and carefully kept. In the year 1890 the sum of 150,022 marks was obtained from the fruit grown on the State roads of Saxony alone, and the income from trees on country roads was greater. The objects in planting trees are said to be primarily to make the road more discernible at night and after snow drifts, and secondarily, to afford pleasure and comfort to wayfarers. Hardy fruit trees are chosen, so that when in bloom the roads are particularly charming; but forest trees are substituted where fruit cannot easily be grown, or where, as in very populous places, or near villages, the fruit might be stolen and perhaps damage also done to the trees thereby. When apple trees are planted, "varieties having long stems and lofty tops" are chosen by preference. Among timber trees, ash and maple are favorites, with wild cherry at a distance from villages. When other reasons do not demand closer planting, apple, pear, and sweet cherry trees are put 30 to 40 yards apart, and sour cherry trees and plums from 7 to 9 yards. The holes for fruit trees, when the soil is rich, are from 3 to 4½ feet wide, and 5 feet when the soil is inferior, the depth being 2 to 3 feet. When dry weather prevails the tree "hollows" should be covered with moss, inverted sod, or similar substances:

To protect young trees against rabbits and hares in winter, or other damages, the stems should be tied up with thorns, straw, or reeds. Wire should be used for this purpose. To protect the trees against insects and to prevent the bursting of the bark in winter, the stems of the fruit trees should in the fall of the year be whitewashed, or covered with a mixture of lime and ox blood, compost, clay, or similar substance. A straw or moss covering is considered a good protection against the drying out of young trees that are especially exposed to the sun and wind.

This is taking a good deal of trouble for roadside trees, but it is well repaid. One special reason, it should be explained, why roadside trees are a necessity in Saxony, is that there are very few fences or hedges in that kingdom, either along the roads or even dividing the fields. Consul Merritt says broadly that "none of the roads in Saxony are fenced. With the exception of a few picketed enclosures there are no fenced grounds in all Saxony. The charming appearance of this kingdom owes much of its beauty to the fact that its wide, well-tilled valleys, its rolling hills crested with dark pine forests, and its fruitful plains are not disfigured by fences of any kind." The question naturally arises as to how it is with the unfenced railways, and on that point this explanation is given:

Crossings on the level are guarded by descending barriers, even in the places remote from towns and villages. Only on such railways as are narrow gauge and called "secundar" railroads is it possible to find level crossings which are unguarded by employees hired and paid by the railroads. In such places warning signs and the locomotive bell guard the traveller on the turnpike. On all wagon roads where steep, abrupt embankments endanger passengers or teams of horses, a barricade is usually built of stone posts connected with heavy angle iron bolted firmly into place.

It further appears that wheelmen or bicyclists must provide lamps for their wheels; keep to the right; carry a metal shield on the front of the wheel with name and address engraved on it; keep off the footpaths; ring a bell when approaching any one, and in some cases abstain from riding side by side. When riding in files a given distance must intervene between them and those who precede them. Wheelmen, as such, pay no taxes. On some State roads heavily laden vehicles are required to have a certain minimum width of tire, while wagons having boltheads or screws protruding from the tire, or having tires with a rounded surface, are not permitted to enter the road at all. Drivers of heavily loaded wagons pursuing a track already well worn must drive on a different part of the road when so directed by any of the road employees.

The city streets of Saxony are now paved largely with beaten asphalt, as Consul Palmer writes, instead of stone, and it has also replaced wood, which was not up to the expectations. In suburban streets, where there are only detached residences or villas, macadamizing is preferred. The paving stones used, besides the beaten asphalt which comes from Val de France, Seyssel, and Sicily, are greenstone, quartz-porphyry, syenite granite, artificial stones from copper slags, and small broken pieces of basalt. There is the same general system of rock substructure and superstructure as on country roads for macadamized streets. For paved streets there is a bedding of gravel sand from the Elbe. Of late years Dresden has had some streets paved with cast slag cubes, measuring 0.175 yard, and very solid. The pavement is smooth, causes little noise, and is easily kept clean. Its disadvantage is in becoming very slippery and offering little hold to hoofs; but it is much employed for gutters and crossings, and must be all the better for the latter if it only causes drivers to pull up a little for fear that their horses may slip, when they might not do so for the sake of pedestrians.

The wood pavements of pine blocks tried in Dresden in 1877 did not last, and were replaced by asphalt. In 1887 oak blocks on a layer of concrete were tried, but cost too much. Very recently extensive experiments have been made with beech wood. The single blocks were fastened with wire, the usual mixture of tar and pitch being used under the blocks and in the cracks; but it is too early yet to judge of the durability of this pavement. In Leipsic the paving is mostly done by private contractors, but the cost does not differ much from that of Dresden. One exceptional pavement for sidewalks is that of ribbed square plates of Dutch tile from Meissen, on a layer of cement, mortar, or concrete. The street car companies have to pay the city for cleaning the pavement between their rails.

Stettin imports her best paving stones from Sweden, the granite being very solid and of fine grain; for sidewalk plates she has Norwegian granite, which is of irregular grain, but splits easily. The streets, being paved with stone blocks, are suited for both light and heavy traffic. Every property holder, says Consul Kellogg, must have his sidewalks swept every morning, and in the hot summer they must be sprinkled several times a day.

Nuremberg is paved with stones of the hardest blue granite, and the city supplies all the material for paving, while the contractors lay it. The city even owns the place from which the sand comes. The macadamized streets in the new portion of the city have for a foundation, according to Consul Block, a layer of six or eight inches of quartzite, a species of sandstone, and upon that a layer of Jura limestone.

In Berlin, as Consul-General Edwards shows, asphalt pavements are in high favor, the system being that of pouring heated asphalt powder over the concrete sub-bedding, and then rolling it. Artificial asphalts, however, have hitherto usually been unsatisfactory, and the same may be said of wood. American cypress and Swedish pine were tried without good result, and there are now incomplete experiments with beech. The iron pavements are also in the experimental stage. One of them uses "wooden impregnated blocks, capped with steel on the upper surface, and laid upon a concrete under-bedding, and the seams are filled with a bituminous mass." Among the stones used are those from Norway, Sweden, and Belgium.

Hamburg has nothing to teach us in the way of street pavements, except what to avoid—at least, that was the condition of affairs there at the date reported on. Frankfort-on-the-Main seems principally noteworthy for having made a success of wood pavements, which have failed in so many other places. Mr. Lindley, the chief engineer, of the five varieties tried prefers the Kerr pavements, made of blocks of Swedish pine four inches deep, set in melted coal tar. Apparently, as Consul-General Mason says, the wood pavements are all honestly and well constructed.

The streets of Magdeburg are uniformly paved with stone. Plauen has a double system of temporary and permanent streets. For example, the sidewalks of the former are gravel, with a frame of slate-clay slabs, and these give way, in the permanent sidewalk to cement, granite, or burnt-clay slabs. Again the temporary streets are laid deep enough to have the permanent put over them. It is rather a noteworthy system.